

CLAIMS:

1. A high-pressure discharge lamp comprising:
a discharge vessel (10) enclosing a discharge space (11) which contains an ionizable filling,
the discharge vessel (10) having a first (2) and a second (3) mutually opposed neck-shaped portion provided with a pair of electrodes (6, 7) arranged in the discharge space (13),
each electrode (6, 7) being tubular over its entire length.
2. A high-pressure discharge lamp as claimed in claim 1, characterized in that the electrodes (6, 7) are free from coils in the discharge space (13).
3. A high-pressure discharge lamp as claimed in claim 1 or 2, characterized in that the electrodes (6, 7) extend to outside the discharge vessel (10).
4. A high-pressure discharge lamp as claimed in claim 3, characterized in that the electrodes (6, 7) are each partially filled with a rod (11) welded to a side of the electrodes (6, 7) facing away from the discharge space (13).
5. A high-pressure discharge lamp as claimed in claim 4, characterized in that the rod (11) extends into the discharge space (13).
6. A high-pressure discharge lamp as claimed in claim 1 or 2, characterized in that the ratio between the inner diameter d_{in} and the outer diameter d_{out} of the electrodes (6, 7) is in the range:

$$0.2 \leq \frac{d_{in}}{d_{out}} \leq 0.8 .$$

7. A high-pressure discharge lamp as claimed in claim 1 or 2, characterized in that the inner diameter of the tubular electrodes (6, 7) is at least 20 μm .

8. A high-pressure discharge lamp as claimed in claim 2, characterized in that the ratio of the outer diameter d_{out} of the tubular electrodes (6, 7) and the inner diameter d_{nsp} of the neck-shaped portions (2, 3) is in the range:

$$0.8 \leq \frac{d_{\text{out}}}{d_{\text{nsp}}} \leq 0.95.$$

9. A high-pressure discharge lamp as claimed in claim 1 or 2, characterized in that the electrodes (6, 7) are made of tungsten.

10. A high-pressure discharge lamp as claimed in claim 1 or 2, characterized in that the ratio between the electric current I_{mhl} of the high-pressure discharge lamp and the outer diameter d_{out} of the electrodes (6, 7) is in the range:

$$2 \leq \frac{I_{\text{mhl}}}{d_{\text{out}}^2 - d_{\text{in}}^2} \leq 6,$$

wherein the electric current is expressed in amperes and the diameter in millimeters.